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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/658,450

09/09/2003

Richard Martin

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MCANDREWS HELD & MALLOY, LTD
500 WEST MADISON STREET
SUITE 3400
CHICAGO, IL 60661

EXAMINER

KIM, WESLEY LEO

ART UNIT

PAPER NUMBER

2617

MAIL DATE

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12/29/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/658,450	Applicant(s) MARTIN ET AL.	
	Examiner WESLEY L. KIM	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to Amendment filed on 9/8/09.
 - Claims 1-28 are pending in the Current Office Action. This Office Action is made FINAL. Arguments are not persuasive.

Response to Arguments

2. Applicant's arguments filed 9/8/09 have been fully considered but they are not persuasive.
 - Applicant argues that Cook does not overcome Gai's deficiencies, namely "the first access point group is communicatively coupled to a first default switch port of said network switch," as recited in Applicant's claim 1.

The examiner respectfully disagrees. From the Gai reference, it is clear that all the LANS are communicatively coupled to a first default switch port of the network switch (Col.11:lines 8-15 and Col.5:lines 20-24 and Fig.1, LANs are communicatively coupled to the root port). Then the examiner introduced Cook to teach that a group of access points can provide service to remote users via a LAN (Col.3:37-46, one or more access points is the group). Therefore, it would have been obvious to a skilled artisan to modify the teachings of Gai with the teachings of Cook, such that one available switch port has a capability to handle a first access point group to provide a hybrid wired/wireless network. This provides a method where group of access points connected to a LAN (the LAN is

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obviously connected to an available switch port as can be seen by Gai) can provide extended coverage of the communication system.

It seems that applicant does not agree that the root port is the claimed default port since it is not "communicatively coupled" with the LAN. The examiner has interpreted "communicatively coupled" to mean that they are merely somehow connected. "Communicatively coupled" is broad and could mean that they are directly or indirectly coupled. Based on the examiners interpretation of the claims, the combined teachings of Gai and Cook reads on the limitations as they are currently recited.

Specification

3. The disclosure is objected to because of the following informalities: The amended specification submitted on 3/3/09 stated that Serial No. 10/658,410 is entitled "Method and System for Providing an Intelligent Switch in a Hybrid Wired/Wireless Local Area Network". However, a search of 10/658,410 does not match up with the provided title. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gai et al (US 6032194) in view of Jeffries et al (US 2002/0085495 A1) and Cook et al (US 6005884).

Regarding Claims 1, 9, and 17, Gai teaches determining based on lowest cost path related information (Col.2:lines 53-56 and Col.4:lines 1-6, the next best information is obviously the next lowest cost path), at least one available switch port on a network switch (Fig.1:114 and Col.7:lines 53-55, switch) for handling a LAN (Col.4:lines 10-15), said LAN is communicatively coupled to a first default switch port of said network switch (Col.11:lines 8-15 and Col.5:lines 20-24 and Fig.1:102, 103, 104, LANs are connected to ports); wherein said first default switch port (Col.2:lines 53-56) is different from said at least one available switch port (Col.4:lines 1-10, default port is different from new root port, i.e. available switch port); provisioning said at least one available switch port of said network switch to provide service to said LAN (Col.12:lines 19-27 and Col.5:lines 44-47, the new root port is the at least one available switch port providing service to said LAN); and communicating information using at least one of said first default switch port and said at least one provisioned switch port of said network switch (Col.12:lines 19-27 and Col.5:lines 44-47, the new root port is the at least one available switch port), however **Gai does not expressly teach** that lowest cost path information is bandwidth related information.

Jeffries clearly teaches that it is well known in the art that lowest cost path information is bandwidth related information (Par.5:lines 10-13). Therefore, one

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of ordinary skill in the art would find it obvious to modify Gai with Jeffries at the time of the invention such that, the lowest cost path information is bandwidth related information, to provide a method where data may be transferred at the best possible rate possible so that the users be provided the best possible service. However, the combination of **Gai and Jeffries does not expressly teach** at least one available switch port having a capability to handle a first access point group.

Cook teaches that a group of access points can provide service to remote users via a LAN (Col.3:37-46, one or more access points is the group).

Therefore, it would have been obvious to a skilled artisan to modify the teachings of Gai and Jeffries with the teachings of Cook, such that one available switch port has a capability to handle a first access point group to provide a hybrid wired/wireless network. This provides a method where group of access points connected to a LAN (the LAN is obviously connected to an available switch port as can be seen by Gai) can provide extended coverage of the communication system.

Regarding Claims 2, 10, and 18, as applied above, Gai et al. as modified by Jeffries and Cook further discloses that the determining further comprises selecting said at least one available switch port from a reserved pool of available switch ports (Figure 3D, Column 11, Lines 41-52; Column 12, Lines 13-27 and 37-42 and 46-55).

Regarding Claims 3, 11, and 19, as applied above, Gai et al. as modified by Jeffries and Cook further discloses returning said selected at least one available switch port to said reserved pool of available switch ports upon abatement of a need to utilize said provisioned at least one available switch port (Figure 3E, Column 14, Lines 37-48).

Regarding Claims 4, 12, and 20, as applied above, Gai et al. as modified by Jeffries and Cook further discloses selecting said at least one available switch port from at least one of a first switching element and a second switching element, said first default switch port being associated with said first switching element (the different ports of the access switch are connected to different backbone switches, additionally some local area networks can communicate directly with more than one switch - Column 10, Lines 49-67; Column 11, Lines 1-7 and 8-24 and 41-51," Column 12, Lines 19-27).

Regarding Claims 5, 13, and 21, as applied above, Gai et al. as modified by Jeffries and Cook further discloses determining at least one a second available switch port having a capability to handle a second access point group, said second access point group having a second default switch port (the same procedure is followed for each local area network connected to the switch for determining a transmission port - Column 7, Lines 20-30; Column 10, Lines 49-67; Column 11, Lines 1-15).

Regarding Claims 6, 14, and 22, as applied above, Gai et al. as modified by Jeffries and Cook further discloses provisioning at least a third available

switch port to provide service to said second access point group (Column 10, Lines 1-12; Column 11, Lines 8-24 and 41-51," Column 12, Lines 19-27).

Regarding Claims 7, 15, and 23, as applied above, Gai et al. as modified by Jeffries and Cook further discloses switching between any two of said at least one available switch port, said at least a second available switch port and said at least a third available switch port (Column 11, Lines 8-24 and 41-51, Column 12, Lines 19-27 and 32-42).

Regarding Claims 8, 16, and 24, as applied above, Gai et al. as modified by Jeffries and Cook further discloses switching between said default switch port and said at least one available switch port in a time period less than on the order of a few milliseconds from at least one of a detectable link failure and a configuration change (change occurs at or about the same instant, and the connection is tested every few milliseconds- Column 12, Lines 4-12; Column 14, Lines 40-51).

Regarding Claim 26, Jeffries further teaches a QOS controller (Par.27:lines 9-11, second logic determines which link has max benefits).

Regarding Claims 26-28, Jeffries further discloses QOS information (Par.5: minimum cost information is QOS information).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WESLEY L. KIM whose telephone number is (571)272-7867. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

/Wesley L Kim/
Examiner, Art Unit 2617